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INDIVIDUALIZATION VERSUS POLARIZATION: ORGANIZATIONAL CULTURES AND SUBCULTURES IN BRAZILIAN AND NORTH AMERICAN HOSPITALS

ABSTRACT

The present study seeks to generate systematic, comparable knowledge about the content and dynamics, of organizational cultures and subcultures of hospitals operating in the USA and Brazil. As a methodological approach, survey data on perceptions of organizational culture were collected from managerial staff of 4 US and 5 Brazilian hospitals. Analyses of Variance and Cluster Analyses were employed to assess the locus of variation in perceptions of organizational culture. The results shows that while perceptions of organizational culture varied significantly by country and industry, variation in the cultures of individual institutions was much greater than variation in national means. While US hospitals studied exhibited considerable individualism in their cultures and subcultures, the Brazilian hospital cultures and subcultures were polarized such that the cultural profile on one institution was often an inverse image of the profile of another.

Keyword: Organizational Culture; Subcultures; Brazilian and North American Hospitals.

INDIVIDUALIZAÇÃO CONTRA POLARIZAÇÃO: CULTURAS ORGANIZACIONAIS E SUBCULTURAS EM HOSPITAIS BRASILEIRO E NORTE-AMERICANO

ABSTRATO

O presente estudo procura gerar conhecimento sistemático e comparável sobre o conteúdo e a dinâmica das culturas e subculturas organizacionais dos hospitais que operam nos EUA e no Brasil. Como abordagem metodológica, os dados da pesquisa sobre percepções de cultura organizacional foram coletados de funcionários gerenciais de 4 EUA e 5 hospitais brasileiros. Analisaram-se as Análises de Variância e Cluster para avaliar o local de variação nas percepções de cultura organizacional. Os resultados mostram que, embora as percepções da cultura organizacional variassem significativamente por país e indústria, a variação nas culturas das instituições individuais era muito maior do que a variação nos meios nacionais. Enquanto os hospitais dos EUA estudados exibiam um considerável individualismo em suas culturas e subculturas, as culturas e subculturas dos hospitais brasileiros estavam polarizadas de tal forma que o perfil cultural em uma instituição era muitas vezes uma imagem inversa do perfil de outra.

Palavra-chave: Cultura Organizacional; Subculturas; Hospitais Brasileiro e Norte-Americano.

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INTRODUCTION

Interest in the cultural aspects of business organizations began slowly in the second half of the 20th century and then peaked toward the mid 1990s and declined thereafter, partly because the relationship between organizational culture and firm performance was found to be sporadic (Boyce, Nieminen, Gillespie, Ryan, & Denison, 2015; Chatman & O'Riley, 2016; Sorensen, 2002). Interest in the cultural aspects of organizations, which deliver healthcare services, came a good deal later but the empirical record linking organizational culture and dimensions of performance has been much better than that for research in organizations in general. Although the research is by no means uniform, from the late 1990s on, a growing stream of research on cultural aspects of health care delivery observed consistent associations between important outcomes such as turnover, medical errors, safety, job satisfaction and burnout and organizational culture (Brazil, Wakefield, Cloutier, Tennen, & Hall 2010; Davies, Mannion, Jacobs, Powell, & Marshall, 2007; Hahn et al. 2007; Shortell, Jones, Rademaker, Gillies, Dranove, Hughes et al., 2000; Zazzali, Alexander, Shortell, & Burns, 2007). Some even see organizational culture considerations to be a major factor determining the ability of large healthcare systems to achieve meaningful reform and improvements in the quality of care (Davies, 2002).

This paper seeks to explore two intuitively important but neglected aspects of the interface between organizational culture and healthcare by examining some of the dynamics of organizational cultures and subcultures in hospitals in Brazil and the USA. By far the great bulk of research applying the organizational culture paradigm to health care has its empirical base in single countries and has not been comparative in nature. Perhaps more importantly, the great bulk of the research we were able to locate took place in the US and northern Europe, especially the UK. We have located virtually no comparative studies of organizational culture in healthcare delivery and no large scale research on organizational culture and healthcare in Latin America (see for example Brazil et al., 2010; Davies, 2002; Davies et al., 2007; Hann, Bower, Campbell, Marshall, & Reeves, 2007; Gifford, Zammuto, Goodman, & Hill, 2002; Jacobs, Mannion, Davies, Harrison, Konteh, & Walshe, 2013; Kaissi, Kralewski, Dowd, Heaton, et al., 2007; Meterko, Mohn & Young 2004; Scott, Mannion, Davies, & Marshall, 2003a; 2003b; Shortell et al., 2000, Wakefield, Blegen, Uden-Holman, Vaughn, Chrischilles, & Wakefield, 2001). Another limitation of the great bulk of research on cultural aspects of healthcare is the implicit assumption that the organizations studied are monocultural. At best scholars admit the possibility that subcultures exist in healthcare settings but they do not include subcultural factors in their research designs.

We believe there are compelling reasons to look at the cultural and subcultural dynamics of healthcare delivery across nations. Cultural studies of organizations have increasingly observed that even in organizations with very strong cultures, subcultural tendencies are present (Alvesson, 2012; Gregory, 1983; Hatch, 2012; Martin, 2002). We believe that this possibility is even greater in the case of healthcare because tensions between economic efficiency and humanistic values should logically be much greater when human life and suffering are involved than in organizations, which deal solely with economic or technological matters. Moreover, the traditional differentiation of the nursing function with its accompanying gender implications is a potent source of subcultural identity which is absent in many industries (Wooten & Crane, 2003).

Likewise, there are intuitive reasons to study organizational cultures of healthcare cross nationally. While less complex businesses like manufacturing or finance tend toward convergence in practices internationally, healthcare systems vary radically in their financing, organization, degree of state involvement, patient processing, salary distribution, professional customs and divisions, regulation and other factors (Mossialos, Wenzl, Osborn & Anderson, 2016). It also seems reasonable to expect that national cultures should affect organizational cultures and that such impacts may have practical implications. If organizational cultures are more similar within healthcare industries across nations than they are between industries within nations, then innovations across countries should travel more easily and more speedily with little need for adjustment. By contrast if national cultures have greater impact, more time and thought will be required to diffuse innovations, and it may be better to seek to develop indigenous administrative models rather than importing practices wholesale from other cultures. In addition, if the dynamics of organizational cultures are radically different from one national health care context to another, it is possible that the cultures, which North American and European research associates with desirable outcomes, will not generate the same results elsewhere. In this case, inductive indigenous research based on local realities may prove more useful than replications of foreign studies.

THEORY

The management of health care in general and hospitals in particular is challenging in modern societies because of conflicts between contradictory values that play out in these contexts. Modern societies have come to value human life in ever-greater degrees

and most democratic societies attempt to guarantee the satisfaction of certain basic needs to all citizens. Concurrently, modern societies value rationality and economic efficiency, which in turn calls for the management of supply and demand through impersonal mechanisms, which often disregard individual needs and preferences.

These conflicting demands come together in particularly challenging ways in healthcare settings. With the constant advance of science and technology, the ability to cure human injury and illness has increased dramatically. This progress, however, is very expensive. Modern health care is highly capital intensive—both in terms of human and financial capital. As health care providers struggle to implement and maintain state of the art equipment and techniques, they must also obtain the financial resources necessary to continue to provide service. In addition to these purely scientific and economic issues, because healthcare in general and hospitals in particular involve pain, fear, and uncertainty for patients and their relations, failures in human climate can cause difficulties even when clinical and financial outcomes are good. One way that these tensions are expressed and resolved (to the degree that they are resolved at all) is in the culture of the organizations that deliver healthcare. Despite these centrifugal forces in healthcare, however, we are unaware of any studies that consider the incidence and nature of subcultural dynamics in hospitals.

HEALTHCARE AND ORGANIZATIONAL CULTURE ACROSS NATIONS.

Are the cultures of healthcare across nations more similar than they are different, or more different than they are similar? One could advance arguments for either proposition. Throughout the world, practices, institutional arrangements and regulatory conventions around healthcare share remarkable similarities and are divided by vast differences (Mossialos et al., 2016). Of perhaps all human practices, healthcare would appear to be one of the most bounded by biological factors. Exchange rates vary, operating systems differ, and property rights, marketing appeals and consumer tastes vary, but body temperature, blood chemistry, pulse rate, and skeletal structure, to name a few, are universal. At the same time, studies have long shown that something as universal and organically determined as physical pain is experienced and interpreted differently across cultures (Callister, 2003; Nayak, Shiflett, Eshun, & Levine, 2000).

The issue is further complicated when one considers research on comparative management and organization. Decades of debate has considered the degree to which common technological and market forces are causing human institutions to become more similar or whether cultural and political differences

generate unique organizations from one nation to another. The so called convergence school of thought has claimed that size, technology and industry impacts organization structure and routines more than culture. The divergence school, by contrast, documents a host of local impacts on the functioning of organizations (Child, 1981; Guillén, 2001; Laurent, 1983). The few cross-national studies of organizational cultures are ambiguous, but tend to support the view that organizational culture is somewhat independent of national culture. For example, Hofstede, who established an international reputation cataloguing differences in the values of IBM executives in different countries, found few differences in a small study of corporate cultures Denmark and the Netherlands (Hofstede, 1985; 1990). In a broader study involving India, Brazil, and the US, Nelson and Gopalan (2003) found few differences in organizational cultures from country to country, but rather more variation at the subcultural level.

To this long-standing stream of research, one might add also the short-lived interest in industry “macro cultures” that occurred during the 90s. A small group of researchers, inspired by industrial economists, became interested in the tendencies of industrial sectors to develop shared social networks, communities of practice, and common norms that mold and constrain cognitions and behaviors (Gordon, 1991). One study by Chatman and Jehn (1994) concluded that industry constrained the amount of variation in organizational culture such that firms in the same industry were much more similar culturally than firms from different industry sectors.

All of the literatures cited above are nuanced and controversial and exist in relative isolation from each other. In none of these research streams are there well settled consensual findings which one might use to frame clear a priori hypotheses regarding the impact of nation and industry sector on the cultures of hospitals, much less their subcultures. As a result, our research here will be exploratory. Despite the absence of strong theoretical or empirical guidance however, a number of obvious questions would logically guide an initial inquiry. We can think of at least three general research questions that could fruitfully be considered:

1. *Will industry or country, or the host organization itself affect the organizational culture of healthcare delivery systems more?* Existing research indicates that there are many industry wide idiosyncrasies. Countries obviously vary culturally. Individual organizations can vary substantially from one to another. However, we have no solid information to date to assess the comparative impact of each of these levels of analysis.

2. *Are monocultural or subcultural forces strongest in healthcare organizations?* Just as industry, nation, and organization have putative but yet unknown impacts, the comparative strength and importance of subcultural forces, Vis a Vis the overall organizational

culture is largely unknown, especially in the field of healthcare.

3. *Do the size and salience of subcultures vary most by nation, industry, or organization?* For instance, it is not unreasonable to expect that older, more homogenous national cultures such as that of Japan lead to more homogenous organizational cultures with weaker subcultures. Other factors might also come to bear. The comparatively higher levels of interpersonal trust (Fukayama, 1996) or lower levels of power distance (Hofstede, 1984) found in studies of the US compared to Latin countries might be expected to generate more subcultural variation in Latin American healthcare systems.

METHODS

There are many ways to conceptualize and “measure” organizational culture as well as a wealth of quantitative and qualitative analyses that can be used to interpret results once data are collected. Our interest in simultaneously looking at variation across organizational, national, and subcultural levels in hospitals required the use of a quantitative instrument well suited to the analysis of cultural manifestations at a number of different levels. We selected Nelsons (Nelson & Gopalan, 2003). Aggregate Value Profile because of its previous use and validation in studies of organizational culture and subcultures across different countries -- including both the USA and Brazil -- for which published normative data is available. Among other things, this permits us to compare a sample of organizations from a variety of industries with the profiles of hospitals. The AVP also struck us as useful for healthcare settings because it contrasts cultural dimensions involving human relationships with task accomplishment, planning and organization, task completion, and other values associated with administrative rationality, which we expect to exist in a relationship of tension in hospitals and clinics. The Aggregate Value Profile is a forced choice instrument which includes dimensions such as affect, loyalty, punctuality, flexibility, and hard work, all of which are juxtaposed against one another to create a multivariate profile illustrating the tensions that exist in social systems (Table 1 contains the names of all 16 dimensions in the instrument). The Aggregate Value Profile generates values between 5 and 20 for 16 variables, which are found to be common cultural themes in a variety of classical anthropological, sociological and management literatures. Once profiles produced by individual respondents are computed, analyses may be undertaken by aggregating across organizational units, hierarchical levels, national samples, or other criteria, or by applying cluster analyses to identify subcultures (Hofstede, 1985; 1990; Jermier, Slocum Jr, Fry, & Gaines, 1991). In the present research, we experimented with a variety of

partitionings of our data including, individual organization, nation, and mechanical clustering (described in detail below).

SAMPLE AND DATA COLLECTION

We applied the Aggregate Value Profiles to the top three hierarchical levels of 4 hospitals within a 60 mile radius of a mid-sized community in the Southern USA and 5 hospitals within a 25 mile radius of the principal trade center of a state in the central western region of Brazil. Both regions are typical of the hinterlands of each country—neither cultural and political vanguards nor backwaters. The hospitals were selected to represent a variety of management styles and institutional types --public, private, profit seeking and nonprofits, younger and older. However, all were similar in size and case intensity. The hospitals studied ranged from 70 to 150 beds and offered a complete range of services including emergency services, operating theaters and intensive care as well as ambulatory services. We limited our study to institutions of similar size and case intensity in order to keep the scope of the study somewhat manageable. A long tradition of research in organization studies associates differences in size and production technology with major differences in structure, climate, and degree of bureaucratization (Hatch, 2012). We hoped that by limiting variation on these parameters, our results would be easier to compare and interpret.

All personnel in the top three hierarchical organizational levels were invited to participate in the study. We chose to limit sampling to the top of the hierarchy in order to capture broad perceptions of the overall institution without undue influence from large subunits or functions and because of our judgment that perceptions of culture and subcultural tensions at the top of the organization are likely to prove more useful for an exploratory study across nations than a less general sampling strategy. We also preferred to focus on the managerial function as a means of providing a conservative view of differences across countries, industries, and within institutions. Given the homogenizing effects of the managerial role (Miner & Miner, 1976), we reasoned that if differences were found at the managerial level it should be likely that future samples including no managers would exhibit even greater differences. Response rates varied from 60% to 100 percent across the 9 institutions with an average response rate of 88 percent resulting in a total of 93 usable questionnaires from Brazil and 107 from the US. Data collection followed the recommendations of the Helsinki Declaration, especially in regards to informed consent and guarantees of the confidentiality of all individual responses collected. No sources of conflict of interest were present in this research.

RESULTS

Given the exploratory nature of this project and our rather broad research agenda, we undertook a variety of different analyses, for which space limitations permit only very brief presentation. We compared the means for perceptions of organizational culture for Brazilian hospitals taken together versus the USA hospitals taken together using simple t tests (Table 1). Also in Table 1, we compared mean perceptions of culture for the US hospitals compared with the published means of a random sample of diverse organizations collected in the USA using t tests (see Nelson & Gopalan, 2003 for an explanation of the industry samples used here). We performed the same comparison for the published means of a similar random sample of diverse organizations collected in Brazil and the Brazilian hospitals taken together (Table 1). We used ANOVAS to compare the means of cultural perceptions for the US hospitals separately and for the Brazilian hospitals taken separately (Tables 2 and 3). Finally we performed cluster analyses within the organizations studied to get a preliminary portrayal of the subcultural dynamics of the hospitals studied (Tables 4 and 5). Heteroscedasticity did not exceed accepted limits on any of the data partitions we performed. While a full exploration and interpretation of this set of rather exhaustive comparisons by industry, nation, organization, and subculture goes beyond the scope of what can be presented in one paper, it is possible to discuss selected results which taken together, shed considerable light on the research questions advanced in our introduction.

Our first research question inquired as to the comparative impact of host country, versus industry (i.e. healthcare), versus organization on the perceptions of culture in hospitals. Although the volume of results we obtained that have some bearing on this first research question is very large, it is possible to outline a few of the most striking findings here. The strongest empirical result was the finding that the hospitals we studied in both Brazil and the USA vary more culturally by organization than they do by either industry or nation. As an example the mean for Brazilian hospital "SRS" for the Hard Work dimension of the Aggregate Value Profile was 10.3 versus 14.3 for Brazilian hospital "SNH"-- a difference of 4 on an instrument with a range of 15 (see Table 3). By contrast the mean on the same dimension for all of the US hospitals combined was 12.5 versus 12.2 for the combined Brazilian hospitals (See Table 1). Similarly, the mean score for Hard Work from a sample of Brazilian organizations taken across a wide range of industrial sectors was 12.48 compared to 12.2 for the combined sample of Brazilian hospitals (See Table 1). The score for Hard work for the mixed sample of US organizations was 14 versus 12.5 for the US hospital sample (Table 1).

The greater magnitude in differences between individual hospitals as opposed to differences between countries or between hospitals and organizations in other industries was found not only for the Hard Work dimension. Differences between the means for individual Brazilian hospitals were greater than the differences between the Brazilian mixed sample and the Brazilian hospital sample for virtually all except one (Exposition) of the Aggregate Profile's 16 dimensions. More importantly for purposes of the present research, differences between the mean perceptions of organizational culture for the combined Brazilian hospital sample compared to the combined USA hospital sample were by and large smaller than differences between individual hospitals in either country. In other words, using the methods and samples presented here, *there appears to be more variation in organizational cultures between hospitals within the countries studied than between the countries themselves*. We can summarize this result in three steps. First, using Tables 2 and 3, we add the largest difference between each mean on the 16 dimensions of the Aggregate Value Profile for the five hospitals in Brazil and the four US hospitals. Second, we compare this sum to the sum of the difference between means of the 16 dimensions of the AVP for comparisons between Brazilian and US hospitals found in Table 1. Third, we compare the differences of the means between the US mixed industry sample and the US hospital (Table 1) sample, and between the Brazilian mixed industry sample and the Brazilian hospital sample (Table 1). This exercise results in five sets of measures:

Sum of differences between Brazilian Hospital Units: 39.2, Number significant at .05: 16/16

Sum of differences between US Hospital Units: 29.7, Number significant at .05: 14/16. Nonsignificant Dimensions: Affect, Abstraction.

Sum of differences between Combined Brazilian and Combined USA hospital samples: 10.02. Significant: 6/16. Significant Dimensions: Time, Quality, Affect, Empathy, Sociability, Status, Abstraction

Sum of differences between mixed US sample and Combined USA hospital sample: 12.6. Significant: 6/16 Significant Dimensions: Hard Work, Time, Affect, Sociability Abstraction, Flexibility.

Sum of differences between mixed Brazilian sample and Combined Brazilian hospital sample: 7.5 Significant: 3/16. Significant Dimensions: Empathy, Sociability, Exposition

These bare summaries without any narrative describing and interpreting the nature of differences on specific cultural dimensions from one partitioning of the data to another are of limited interpretative utility. They do however provide some idea of the magnitude of the effects of different factors on perceptions of organizational culture in hospitals in Brazil and the USA. Aside from the already mentioned observation

that variation between hospitals is more salient than between countries or industrial classifications, we note that variance in cultural perceptions between hospitals is somewhat greater in the Brazilian sample than in the USA sample (39.2 versus 29.7) with a corresponding difference in the number of statistically significant differences observed (16 versus 14). Conversely, the distance between perceptions of organizational culture in hospitals versus the general population of organizations is smaller in Brazil than in the USA (7.5 with three significant dimensions versus 12.6 with six significant differences).

We turn now to our second research question: Are monocultural or subcultural forces strongest in healthcare organizations and do subcultural dynamics vary by country? The question of the locus of homogeneity or heterogeneity can be addressed in a number of ways from ethnography to the analysis of the distribution of secondary data. Given the quantitative focus of this paper, the use of cluster analysis to get an idea of the degree of variation in different partitions of the data seemed a logical starting point. We therefore cluster analyzed each of our nine organizations, generating a two cluster solution for each hospital (see Tables 4 and 5). (We also generated a variety of other cluster results the discussion of which space will not allow, but which do not contradict to conclusions drawn here.) The two cluster solutions revealed substantial internal variance in all nine hospitals. With one exception, for all sixteen dimensions there was at least one cluster pair within the hospital sample, which featured a difference greater than the difference between the means of pairs of hospitals, indicating the presence of deep divisions in the perceptions of organizational culture in all institutions, studied.

SIZE AND SALIENCE BY NATION AND ORGANIZATION.

We now take a preliminary look into limited aspects of our third research question: *Do the size and salience of subcultures vary most by nation, industry, or organization?* The size of the subcultural clusters are substantial for all nine of the hospitals studied, ranging from equally divided factions to large dominant groups and smaller oppositional clusters (See Tables 4 and 5). The sizes of these subcultural groupings varied substantially in both Brazil and the US ranging from subgroups of approximately equal size (MND 12: 14) in the US and (MVG 10:11) in Brazil, to a minimum of 24% of all of the responses collected for the organization (SRS 12:4 in Brazil). The Brazilian hospitals were slightly less evenly divided with smallest subgroups of 24, 25, 33, 44 and 45 percent versus 28, 29, 41 and 46 percent for the US. This suggests that even the most homogenous cultures in our sample harbored large pockets of persons whose perceptions were different from the majority, when

indeed a clear majority existed. These differences in perceptions, moreover, were not insignificant. While subgroups often differed little on several dimensions, in all the organizations studied, be they Brazilian or North American, differences between cluster centroids of 3-5 full points were found on at least 5 to 7 of the 16 dimensions of the Aggregate Value Profile. Hence, as we noted in the previous section, differences within organizations were fully as extensive as differences between organizations, and much larger again than differences in organizational culture by country or industry.

We observed also that the hospitals with larger dominant groups (i.e. smaller subcultures) had better reputations, although our evidence is anecdotal for the Brazilian hospitals. Patient evaluations collected by the US department of health and human services and across several years indicated that hospitals DOH and NMR consistently had more favorable patient ratings than hospitals LGN and MND. We did not have access to formal evaluations in Brazil, but strong anecdotal evidence similarly suggests that hospitals SNH and SRS, with their smaller subcultures, had reputations for better patient care than the other three hospitals in the Brazilian sample.

POLARIZATION ACROSS BRAZILIAN HOSPITALS

If our research stopped at the national or industry levels, cultural adjustment while changing countries or industries would not appear to pose major challenges compared to challenges created by the idiosyncrasies of individual organizations and subcultures. However, deeper, more detailed examination of the data reveals new and potentially important patterns. Although the differences between perceptions of culture in the individual hospitals are indeed substantial and each contains its own idiosyncrasies and uniqueness, we identified patterns linking across hospitals in Brazil that were absent in the US. The cultures portrayed in the means of the Brazilian hospitals are substantially polarized, especially those of the best-equipped and most prestigious hospital SRS compared to the prominent and oldest but underfunded charity hospital SNH. Twelve of the 16 dimensions of the Aggregate Value Profile are high for SRS and low for SNH or vice versa. For instance, SRS is lowest in Work, Time Orientation, Empathy and Sociability while SNH is highest on these dimensions. SRS is highest of the 5 Brazilian hospitals in Status and Politics and Abstraction while SNH is Lowest. SRS is also highest in Flexibility while SNH is lowest. This oppositional pattern is reproduced to a significant degree in other hospitals. HGU looks much like SNH on several dimensions, only less extreme than SNH. It is high in Empathy, Loyalty, Hard Work, and Low in Politics, Abstraction, and Flexibility. MVG by

contrast is low in Empathy, Loyalty, and Hard Work and High in Politics. In turn, the means of HMVG are similar to those of SRS while the means of HGU are similar to those of SHL. Only hospital FMN features a pattern of means on the Aggregate Value Profile, which appears to be quite independent of the other four hospitals studied.

The results of our cluster analyses of the Brazilian hospitals amplified this result. The means of largest clusters of SNH and SRS (see Table 4) exhibit that same oppositional pattern of the grand means of SNH and SRS displayed in Table 4, only with even greater differences. For instance, the grand mean on Time for SRS is 11.9 versus 14.4 for SH (see Table 3). In the cluster analysis however, the largest cluster for SRS had a mean of 11, versus 15 for SRS (see Table 4). Similarly, the grand mean on Flexibility for SRS is 13.1 versus 11.3 for SNH while the largest cluster of SNH had a mean of 11 versus 13.8 for SRS.

The four US hospitals studied exhibited no such result. No pair of hospitals displayed an oppositional pattern where the high values of one were matched by low values in another. The cluster analyses of the US hospitals similarly did not exhibit systematic subcultural consistencies in their groupings. The larger clusters in each hospital appeared to share some attributes across all four hospitals—higher Work quadrant scores for instance—but even here there were substantial differences across pairs of hospitals such that it is not possible to identify consistent patterns of similarity or inversion from one hospital to another. Compared to the Brazilian results, the US results suggested the existence of independent idiosyncratic cultures and subcultures from one US hospital studied to the next. In our discussion and conclusions, we will speculate as to the origins of this configuration of results and its possible theoretical and practical implications.

Table 1: US Hospitals vs US General Sample/Brazilian Hospitals vs Brazilian General Sample***

	US Hos	USA	Brazil	Braz Hos	Sig. BR-US *	Sig. Indust.**
Effort	12.97	14.00	12.48	12.2	NS	.05 US
Time	11.34	12.30	12.31	12.8	NS	.1 US
Finish Job	12.3	12.13	12.30	12.4	NS	NS
Quality	15.37	14.96	14.78	13.9	.05	NS
Affect	13.4	11.48	10.67	11.1	NS	.01 US
Empathy	11.90	10.43	10.67	12.4	.01	.05BR/US
Sociability	11.25	12.52	12.31	13.5	.01	.05US/BR
Loyalty	12.95	12.03	12.88	13.2	NS	NS
Dominance	12.20	12.65	12.24	12.7	NS	NS
Status	12.9	13.45	12.04	11.5	.05	NS
Politics	11.87	12.29	12.50	12.2	NS	NS
Leader	14.1	14.00	13.0	13.7	NS	NS
Abstract Thought	11.1	12.32	12.89	12.1	.05	.05 US
Planning, Org.	11.8	12.72	12.47	12.6	.1	.1 US
Exposition	11.6	12.40	13.25	11.8	NS	.01 BR
Flexibility	12.8	10.34	12.63	11.95	.1	.01 US

*This column indicates significance of differences between means of US and Brazilian Hospitals.

**This column indicates significance of differences between country and hospital means. US indicates a significant difference between the US general sample mean and US hospitals. BR indicates a significant difference between the Brazilian general sample mean and Brazilian hospitals.

***The general country means are reproduced with permission from Nelson and Gopalan, 2003.

Table 2: Means for Individual US Hospitals*

DIMENSIONS	LG	MN	NMR	DC
Effort	12.9	12.3	14.1	12.5
Time	11.0	12.4	11.3	10.7
Finish Job	11.7	13.1	11.6	12.8
Quality	14.6	15.0	15.8	14.5
Affect	13.2	13.6	14.0	14.0*
Empathy	12.6	11.6	11.4	13.2
Sociability	12.0	13.6	12.9	11.6
Loyalty	15.0	9.9	11.8	11.4
Dominance	12.2	11.5	11.4	11.0
Status	13.2	13.5	12.5	12.0
Politics	13.2	12.1	11.5	10.2
Leader	14.5	13.6	16.4	15.2
Abstract Thought	11.3	11.0	11.6	11.1*
Planning Org.	10.6	12.1	11.2	12.8
Exposition	11.8	12.2	11.0	11.7
Flexibility	9.9	11.5	12.6	10.3

*One way -ANOVAS yielded significant differences for all dimensions except Affect and Abstraction.

Table 3: Means for Individual Brazilian Hospitals*

	FMN	GNU	SRS	SNH	MGV
DIMENSIONS					
Effort	12.2	12.3	10.2	14.4	11.8
Time	11.9	13.0	11.9	14.4	12.6
Finish Job	12.7	12.3	12.4	12.9	11.6
Quality	12.7	14.5	13.1	15.9	14.2
Affect	11.8	11.9	10.6	10.6	11.1
Empathy	12.2	13.7	10.9	13.9	11.3
Sociability	14.3	13.9	12.2	14.3	13.2
Loyalty	12.0	14.5	12.9	14.1	12.6
Dominance	12.5	13.7	12.9	12.0	12.5
Status	12.2	10.8	13.5	9.0	12.2
Politics	12.2	11.1	13.3	10.6	13.2
Leader	13.4	12.5	14.1	13.4	14.5
Abstract Thought	11.9	11.8	13.3	10.2	13.2
Planning, Org.	13.3	11.7	13.1	12.4	12.2
Exposition	12.0	10.9	12.4	11.4	12.1
Flexibility	12.5	11.0	13.1	11.3	11.7
Sample Size	16	16	26	26	22

*ANOVAS for all Dimensions are Significant at .05 or less

Table 4: Subcultural Clusters for 5 Brazilian Hospitals

SNH			SRS		MVG		FMN		GNU	
	<u>19</u>	<u>6</u>	<u>4</u>	<u>12</u>	<u>10</u>	<u>11</u>	<u>9</u>	<u>7</u>	<u>10</u>	<u>5</u>
A	14,0	15,0	12,0	10,0	14,6	9,0	13,7	10,0	13,5	10,0
B	15,0	12,0	13,0	11,0	13,0	12,0	12,0	12,0	13,8	11,0
C	13,0	16,0	16,0	11,0	12,0	11,0	13,0	12,0	13,3	10,0
D	16,0	11,0	12,0	13,0	15,0	13,0	15,0	10,0	15,8	12,0
E	11,0	9,0	13,0	9,0	10,0	12,0	11,0	13,0	12,0	12,0
F	14,0	13,0	15,0	9,0	12,0	11,0	13,0	11,0	15,0	11,0
G	15,0	13,0	12,0	12,0	15,0	11,6	16,0	12,0	14,0	13,0
H	15,0	13,0	15,0	12,0	13,0	12,0	12,0	13,0	15,0	13,0
I	11,6	13,5	11,0	14,0	11,0	14,0	11,0	14,0	13,0	16,0
J	8,0	11,5	12,0	15,0	11,4	13,0	10,0	15,0	9,0	14,6
K	9,4	14,5	14,0	14,0	11,0	15,0	11,0	13,0	10,0	15,0
L	13,0	15,0	13,0	15,0	14,5	14,5	12,0	15,0	12,0	13,0
M	10,0	11,0	13,0	14,0	11,0	15,0	12,0	12,0	12,0	12,0
N	13,0	11,0	9,0	14,0	13,0	11,5	13,0	13,0	12,0	11,0
O	11,0	12,0	11,0	13,0	11,5	12,6	13,0	11,0	10,0	13,0
P	11,0	12,0	9,5	13,8	11,0	12,0	13,0	12,0	10,0	13,6

Table 5: Subcultural Clusters for 4 US Hospitals

LGN			MND		NMR		DOH	
	<u>10</u>	<u>7</u>	<u>14</u>	<u>12</u>	<u>19</u>	<u>11</u>	<u>24</u>	<u>10</u>
A	13,9	11,4	12,8	11,8	15,5	11,5	13,5	10,0
B	10,7	11,4	12,0	13,0	9,8	13,9	10,1	12,5
C	11,5	12,1	12,7	13,6	11,3	12,0	12,9	11,2
D	16,5	12,0	17,6	12,1	18,0	12,0	16,0	10,8
E	14,0	12,0	15,0	12,0	14,6	13,0	15,3	11,2
F	12,0	13,5	13,0	10,0	11,6	10,8	14,5	10,2
G	11,0	14,0	12,6	14,8	12,0	14,5	11,5	11,7
H	15,9	11,0	11,0	8,7	12,2	11,0	16,1	10,9
I	12,0	12,6	11,0	12,0	9,5	14,8	10,3	13,1
J	13,0	14,0	11,0	16,6	10,6	16,0	11,8	12,5
K	10,0	17,9	8,0	17,0	9,0	16,0	10,2	10,5
L	12,7	17,0	15,0	12,0	16,0	12,0	14,5	17,0
M	12,4	9,7	11,5	10,5	12,5	10,0	10,2	14,0
N	11,0	10,0	13,6	10,4	12,6	9,0	12,2	14,5
O	10,5	14,0	11,0	13,7	11,0	11,0	10,6	12,6
P	9,8	10,4	12,0	11,0	13,6	11,0	10,0	10,8

DISCUSSION AND CONCLUSIONS

Our admittedly exploratory research raises many more questions than it answers, but the consistency and magnitude of some of the effects we observed open new vistas into an important dimension of healthcare management that has not yet been the subject of systematic research. Here we summarize

what we consider the most important theoretical and practical implications of our present study.

First, we note that although the differences are small compared to other factors there were statistically significant, differences between BR and US hospitals on a number of dimensions of theoretical and practical interest. The US hospitals were highest in perceptions of the importance of quality while the BR hospitals were lowest—the means for other types of organization

in BR and the US occupying intermediate positions. The US hospitals were also the highest of all samples on Flexibility while the BR hospitals were lower but not lowest. The BR hospitals had the highest mean sociability of all of our samples while the US hospitals were lowest. Taking these extremes together, we might expect that quality initiatives used in North American hospitals might not attain the same degree of resonance and collaboration in Brazil and that resistance to change might be greater. One might also expect that North American interventions that do not involve a collaborative or participative dimension might meet resistance because of the considerable gap in Sociability between US and BR hospitals we identified.

Other expectations and cautions might be formulated based on high Status and Affect and low Abstraction in US hospitals compared to their BR counterparts. In a hypothetical acquisition of a BR healthcare provider by a US firm, the acquiring managers might expect greater deference to formal credentials, rank, and position, and a greater practical orientation than their Brazilian counterparts might in the healthcare sector. They might also expect to see a greater emphasis on warmth and demonstrations of affect toward patients and colleagues.

However interesting these differences in cultural perceptions between US and Brazilian hospitals may be, other more robust results point toward other factors, which may also have important implications. We noted that the overall cultural distance between the US hospitals studied was slightly less than the Brazilian hospitals studied while the distance between the US hospitals as a whole was greater than the mean perceptions of culture for a mixed sample of US organizations. The Brazilian hospitals by contrast exhibited slightly greater cultural variation between individual units and somewhat less distance from the mean perception of organizational culture obtained from a mixed sample of Brazilian organizations. An intuitive implication of these results might be that Brazilian hospitals will have a somewhat easier time adopting practices and innovations from other industry sectors than USA based hospitals.

By far, the largest effects were found at the organizational and sub organizational (i.e. subcultural) level, not at the industry or national level. The results for both the Brazilian and US hospitals exhibited substantial differences in perceptions of culture from one institution to the next, and clusters of diverse cultural perceptions existed in all nine hospitals studied. Moreover, in all nine hospitals, at least a fourth of our respondents viewed the organization's culture differently from the majority cluster. Although not part of our original research agenda, we observed that the two hospitals in Brazil and the two hospitals in the US with the most favorable patient reputations featured the largest cultural clusters compared to other institutions with more balanced cluster sizes.

All of the results discussed up to this point are provocative and suggest directions for future empirical and theoretical inquiry. For us however, the most interesting and suggestive result is found in the existence of an oppositional pattern in the Brazilian results that is absent in the US results. Both the US and Brazilian hospitals display greater variance in cultural perceptions between hospitals than that found using industry or national partitions. Nevertheless, in the Brazilian case that variance is clearly patterned across hospitals while in the US each hospital seems to be a world unto itself. We suspect this difference has its origins in a fundamental difference in the history of healthcare in each country. In the 14th century Dom Joao II, one of the early Kings of Portugal decreed the creation of "a confraternity of mercy"—a lay organization recognized by the crown and church, which would help care for the poor and sick. This lay goodwill, composed principally of prominent citizens, flourished and was transplanted to the eventual Portuguese colonies in Angola, Mozambique, and Brazil. Over time the brotherhood became the major—indeed in most towns, the only—patron of healthcare, so that virtually every large town in Brazil of any age has a hospital called Santa Casa de Misericordia, founded and maintained by this fraternity (Ivamoto, 1998; 1999). These were Brazil's first hospitals and were historically charitable in nature and mandate. University teaching hospitals and government and for profit hospitals, while currently much greater in number, came much later historically and invariably grew up in the shadow of the Santas Casas. When the Brazilian state first propagated state sponsored and controlled healthcare programs for government and unionized workers under the tutelage of Getulio Vargas during the 1940s, it was doubtless influenced by the culture and values of the Santa casa institutions and their leaders. In addition, although the move to universal state sponsored healthcare system in 1988 was influenced by Marxist ideology, it is likely that the shadow of the Santas Casas still loomed large (Paim, Travassos, Almeida, Bahia, & Macinko, 2011). Contrast this with the American colonies founded by groups as diverse as Dutch and English trading companies, French Huguenots, Quakers, puritains, pietists, diests and slave owners in various combinations (Middlekauf, 2007). No such unifying cultural force was present and to this day, no national uniformity around healthcare exists. Considering these historical/cultural/institutional antecedents, it does not seem surprising that we identified two major cultural themes in Brazilian hospitals—one focused on relations—empathy, loyalty, coupled with hard work versus a more flexible, political, status oriented, and rational or intellectual theme. The more traditional and humanistic theme seems to be stronger in the charitable and state supported institutions, while the more market, rationality, and politically oriented theme is stronger in private hospitals dominated by doctors.

PRACTICAL IMPLICATIONS

Some tentative interpretations of this study suggest possible practical implications and directions for future research. Of several possibilities, the four below strike us as most important or promising.

1. National and industry differences exist, but each individual hospital tends to have its own distinct cultural heritage. Experience in one institution, even in the same nation or region does not automatically equip one to intervene in another without careful study of the particulars of that institution.

2. Subcultures are ubiquitous and seem to matter. Hospitals with larger, more robust dominant cultures may provide better service than those in which subcultural groups of similar size and strength are juxtaposed. Support for and opposition to managerial initiatives, innovations, and proposals are likely to be conditioned by their subcultural origin and by leaders' skill in presenting ideas in ways that take diverse clusters of cultural values into account.

3. In national settings with a history of hegemonic or monolithic forces, one possible impact may not be cultural uniformity, but cultural polarization. In the Brazilian case, the long influence of crown and church appears to have favored a strong humanistic culture in healthcare, which later became opposed by a rationalistic, market-oriented counterculture leading to polarization within and between hospitals.

4. In the absence of dominant institutional and cultural forces, hospitals may develop more individualistic, idiosyncratic cultures.

In this paper, we are not prepared to speculate as to the advantages and disadvantages of polarized or individualistic cultural fields in healthcare. We suspect however, than in settings (like Brazil) where hospitals tend toward cultural polarization, it will be easier for executives and consultants to diagnose and acculturate themselves to different hospitals quickly because issues and conflicts will be more predictable. We are also willing to predict that as the acrimonious debates around US healthcare funding and administration take their course and result in greater state involvement, increasing cultural polarization will be found between and within US hospitals.

REFERENCES

- Alvesson, M. (2012). *Understanding organizational culture*. London: Sage Publications.
- Boyce, A. S., Nieminen, L. R., Gillespie, M. A., Ryan, A. M., & Denison, D. R. (2015). Which comes first, organizational culture or performance? A longitudinal study of causal priority with automobile dealerships. *Journal of Organizational Behavior*, 36(3).
- Brazil, K., Wakefield, D. B., Cloutier, M. M., Tennen, H., & Hall, C. B. (2010). Organizational culture predicts job satisfaction and perceived clinical effectiveness in pediatric primary care practices. *Health Care Management Review*, 35(4), 365-371.
- Callister, L. C. (2003). Cultural influences on pain perceptions and behaviors. *Home Health Care Management & Practice*, 15(3), 207-211.
- Chatman, J. A., & Jehn, K. A. (1994). Assessing the relationship between industry characteristics and organizational culture: how different can you be? *Academy of Management Journal*, 37(3).
- Chatman, J. A., & O'Reilly, C. A. (2016). Paradigm lost: Reinvigorating the study of organizational culture. *Research in Organizational Behavior*, 36: 199-224.
- Child, J. (1981). Culture, Contingency, and Capitalism in the Cross-national Study of Organizations, in LL Cummings and BM Staw (eds). *Research in Organizational Behaviour*. Greenwich, CT: JAI Press, 3: 303-356.
- Davies, H. T. (2002). Understanding organizational culture in reforming the National Health Service. *Journal of the Royal Society of Medicine*, 95(3), 140-142.
- Davies, H. T. O., Mannion, R., Jacobs, R., Powell, A. E., & Marshall, M. N. (2007). Exploring the relationship between senior management team culture and hospital performance. *Medical Care Research and Review*, 64(1), 46-65.
- Fukuyama, F. (1996). *Trust: human nature and the reconstitution of social order*. Simon and Schuster.

- Gifford, B. D., Zammuto, R. F., Goodman, E. A., & Hill, K. S. (2002). The relationship between hospital unit culture and nurses' quality of work life/Practitioner application. *Journal of Healthcare Management*, 47(1), 13-25.
- Gordon, G. G. (1991). Industry determinants of organizational culture. *Academy of Management Review*, 16(2), 396-415.
- Gregory, K. L. (1983). Native-view paradigms: Multiple cultures and culture conflicts in organizations. *Administrative Science Quarterly*, 28: 359-376.
- Guillén, M. F. (2001). *The limits of convergence: Globalization and organizational change in Argentina, South Korea, and Spain*. Princeton University Press.
- Hann, M., Bower, P., Campbell, S., Marshall, M., & Reeves, D. (2007). The association between culture, climate and quality of care in primary health care teams. *Family Practice*, 24(4), 323-329.
- Hatch, M. J., & Cunliffe, A. L. (2012). *Organization theory: modern, symbolic and postmodern perspectives*. Oxford: Oxford University Press.
- Hofstede, G. (1984). *Culture's consequences: International differences in work-related values*. Sage, 5.
- Hofstede, G. (1985). The interaction between national and organizational value systems. *Journal of Management Studies*, 22(4), 347-357.
- Hofstede, G., Neuijen, B., Ohayv, D. D., & Sanders, G. (1990). Measuring organizational cultures: A qualitative and quantitative study across twenty cases. *Administrative Science Quarterly*, 35: 286-316.
- Ivamoto, H. S. (1998). Santa Casa de Misericórdia de Santos: sinopse histórica. *Acta medica Misericórdia*, 1: 7-10.
- Ivamoto, H. S. (1999). Misericórdias: O magnífico legado luso. *Acta Médica Misericórdia*.
- Jacobs, R., Mannion, R., Davies, H. T., Harrison, S., Konteh, F., & Walshe, K. (2013). The relationship between organizational culture and performance in acute hospitals. *Social science & medicine*, 76, 115-125.
- Jermier, J. M., Slocum Jr, J. W., Fry, L. W., & Gaines, J. (1991). Organizational subcultures in a soft bureaucracy: Resistance behind the myth and facade of an official culture. *Organization Science*, 2(2), 170-194.
- Kaissi, A., Kralewski, J., Dowd, B., & Heaton, A. (2007). The effect of the fit between organizational culture and structure on medication errors in medical group practices. *Health Care Management Review*, 32(1), 12-21.
- Laurent, A. (1983). The cultural diversity of western conceptions of management. *International Studies of Management & Organization*, 13(1-2), 75-96.
- Martin, J. (2002). *Organizational culture: Mapping the terrain*. London: Sage Publications.
- Meterko, M., Mohr, D. C., & Young, G. J. (2004). Teamwork culture and patient satisfaction in hospitals. *Medical Care*, 42(5), 492-498.
- Middlekauff, R. (2007). *The Glorious Cause: The American Revolution, 1763-1789*. Oxford University Press.
- Miner, J. B., & Miner, M. G. (1976). Managerial Characteristics of Personnel Managers. *Industrial Relations: A Journal of Economy and Society*, 15(2), 225-234.
- Mossialos, E., Wenzl, M., Osborn, R., & Anderson, C. (2016). *2015 International Profiles of Health Care Systems*. NY: The Commonwealth Fund.
- Nayak, S., Shiflett, S. C., Eshun, S., & Levine, F. M. (2000). Culture and gender effects in pain beliefs and the prediction of pain tolerance. *Cross-Cultural Research*, 34(2), 135-151.
- Nelson, R. E., & Gopalan, S. (2003). Do organizational cultures replicate national cultures? Isomorphism, rejection and reciprocal opposition in the corporate values of three countries. *Organization studies*, 24(7), 1115-1151.
- Paim, J., Travassos, C., Almeida, C., Bahia, L., & Macinko, J. (2011). O sistema de saúde brasileiro: história, avanços e desafios. Retrieved May 28, 2011, from http://www.escolasmedicas.com.br/art_det.php?cod=22.
- Scott, T., Mannion, R., Davies, H. T., & Marshall, M. N. (2003a). *Healthcare performance and organisational culture*. United Kingdom: Radcliffe Medical Press Ltd.
- Scott, T., Mannion, R., Davies, H. T., & Marshall, M. N. (2003b). Implementing culture change in health care: Theory and practice. *International Journal for Quality in Health Care*, 15(2), 111-118.

Shortell, S. M., Jones, R. H., Rademaker, A. W., Gillies, R. R., Dranove, D. S., Hughes, E. F., ... & Huang, C. F. (2000). Assessing the impact of total quality management and organizational culture on multiple outcomes of care for coronary artery bypass graft surgery patients. *Medical Care*, 38(2), 207-217.

Sorensen, J. B. (2002). The strength of corporate culture and the reliability of firm performance. *Administrative Science Quarterly*, 47(1), 70-91.

Wakefield, B. J., Blegen, M. A., Uden-Holman, T., Vaughn, T., Chrischilles, E., & Wakefield, D. S. (2001). Organizational culture, continuous quality

improvement, and medication administration error reporting. *American Journal of Medical Quality*, 16(4), 128-134.

Wooten, L. P., & Crane, P. (2003). Nurses as implemented of organizational culture. *Nursing Economics*, 21(6), 275.

Zazzali, J. L., Alexander, J. A., Shortell, S. M., & Burns, L. R. (2007). Organizational culture and physician satisfaction with dimensions of group practice. *Health Services Research*, 42(3p1), 1150-1176.